The universities, of course, do keep taking the grants, for the plain reason that if they stop they will begin to lose researchers and their science departments may well go to pot.

The extent to which the universities subsidize research by paying indirect costs out of their own funds has not been firmly established. The evidence most often quoted is contained in a 1962 NSF study, *Indirect Costs of Research in Colleges and Universities, Fiscal Year 1960*, which shows that in fiscal year 1960 indirect cost rates averaged 28 percent of direct costs for a selected group of large colleges and universities (those for which direct costs for research were $250,000 or more) and 32 percent for a sample of smaller institutions.

What is even more difficult to show, of course, is the effect on the institutions of their transfer of other funds to make up the portion of the science research costs not covered by federal payments. University administrators and champions of the humanities and social sciences argue that the diversion of funds further unbalances the total educational program, which has already grown lopsided because of the flow of federal funds into university science.

Congress as a whole has not appreciated these subtleties, and many legislators harbor doubts that the government is getting its money's worth out of basic research.

They tend to be more tolerant of research contracts, which they regard as providing payment for specific services rendered. Grants, on the other hand, seem to be regarded as gifts, and one need not look too far to find the feeling expressed by Senator Allen J. Ellender (D–La.) in the fiscal 1964 Defense Appropriations hearings in the Senate.

Defense Secretary Robert McNamara had told the senators he felt that in general, in respect to research, the universities are subsidizing the Defense Department rather than the reverse. Ellender said, "That is not the way I heard it," and told McNamara, "You might be surprised if you read the list of money being spent for research in the various universities not only to pay the teachers, but also to construct buildings and facilities around the school."

Congress seems, so far, unconvinced by the argument that the support of scientific research and education is in the national interest and can be effected with the least distortion of university programs through the means of grants.

Most legislators, to be sure, are unfamiliar with the intricacies of the controversy on overhead. More hard information on actual practices within institutions and on effects of present policies might help to dispel the confusion that certainly exists.

It should be noted that, among officials in some research-supporting agencies, there is genuine uncertainty about what policy on reimbursement of indirect costs finally would be the most equitable and desirable. Federal research projects vary widely in their value to the government and to the universities. It is generally agreed that there are some projects for which the government should pay all costs. But there are others, often involving grants, from which the universities may derive benefits for which they reasonably could be expected to pay part of the costs. It is this problem of cost sharing which remains the hard core of the overhead problem.

The science agencies and the Office of Science and Technology have recently embarked on a joint effort, first to gain more basic data and then to recommend changes in Budget Bureau Circular A-21, which is the most widely consulted guide for computing indirect costs.

Until these things are done, university emissaries dealing with Congress on overhead costs will have to continue to rely on old-style personal diplomacy.

—JOHN WALSH

Announcements

Stanley McCormick Hall, the first permanent residence for women at Massachusetts Institute of Technology, was dedicated last week in Cambridge. The eight-story building for undergraduates has facilities for housing and feeding 116 women. It was built as the result of a $2 million gift from Mrs. Stanley McCormick, a 1904 graduate of MIT.

MIT admitted its first coed, Ellen Swallow, in 1871 as a special student, keeping her name off the records in case the "experiment" of having a woman student failed. But the experiment succeeded, and she ended up teaching chemistry at the Institute. Today, of the total enrollment of 6600 (including 3100 in graduate school), over 240 students are women, about half of them in graduate training.

The Biophysical Society has announced the availability of a free **placement service.** Further information is available from I. Gray, Director, Placement Service, P.O. Box 668, Frederick, Md.

The **Canadian Photobiology Group** was organized recently "to advance the study of photobiology," or the effects of light on living things. The group aims to provide meetings of Canadian biologists, chemists, and physicists, to adopt standardized methods, and to work with similar organizations in other countries through affiliation with the Comité International de Photobiologie. The group's chairman is G. Krotkov, biology professor at Queen's University, Kingston, Ont.

The **Pan American Health Organization** has received a grant of $5 million from the W. K. Kellogg Foundation to build a permanent headquarters. In return, the organization must spend an equal sum over a period of 20 years on education, training, nutrition, and water programs in the hemisphere. The headquarters of the organization will be built in Washington, D.C., on land given by the U.S. government.

A **psychiatric center** for emotionally disturbed children is being established at the University of Pennsylvania. The Oakbourne Hospital, West Chester, Pa., has announced plans to join the university, the Philadelphia Child Guidance Clinic, and the Children's Hospital of Philadelphia, in a center for the teaching, care, and treatment of emotionally ill children. Each institution will retain its autonomy. I. S. Ravdin, vice president for medical affairs at the university, heads a ten-member committee to implement the plans for the psychiatric center.

Meeting Notes

Papers are being solicited for presentation at an international conference on **mass spectrometry** 14–18 September 1964 in Paris. The sponsors of the meeting are Committee E-14 on mass spectrometry of the American Society for Testing and Materials, GAMS (the

French Society on Mass Spectrometry), and the Hydrocarbon Research Group, of England. Papers may be delivered in English or French. Deadline for receipt of abstracts: *30 November*. (Secrétariat, GAMS, 1, rue Gaston Boissier, Paris 15)

A symposium on the significance for public health of recent advances in **nutrition** will be held 22 November, in Baltimore, Md. The meeting is sponsored by Johns Hopkins University. Topics to be covered are the effects of maternal nutrition on offspring and the relationships of nutrition, infection, and infectious agents. (B. F. Chow, Dept. of Biochemistry, School of Hygiene and Public Health, Johns Hopkins University, Baltimore 5, Md.)

The American Society for **Cell Biology** has scheduled its annual meeting 6–8 November, in New York. Two symposia will be presented, on regulation of biosynthesis and transport across cell membranes. In addition, approximately 200 contributed papers will be read. (David Prescott, Biology Div., Oak Ridge Natl. Laboratory, P.O. Box Y, Oak Ridge, Tenn.)

The ninth symposium on **scintillation and semiconductor counters** is scheduled 26–28 February, in Washington. It is sponsored by the U.S. Atomic Energy Commission, the National Bureau of Standards, and the Institute of Electrical and Electronics Engineers. Papers are invited on photomultipliers and image tubes, scintillators and combinations, semiconductor and special detectors, and data acquisition and processing. Deadline for receipt of abstracts: *1 December*. (W. A. Higginbotham, Brookhaven National Laboratories, Upton, N.Y.)

Kyoto, Japan, will be the site of an international symposium on the **chemistry of natural products**, 12–18 April. The meeting is organized by the Science Council of Japan, under the auspices of the International Union of Pure and Applied Physics. Papers are invited on structure determination, synthesis, and general chemistry of "natural products," that is, substances produced by micro-organisms, plants, and animals. Papers may be presented in any language, although English is preferred. Deadline: *1 December*. (Chemistry Section, NSF, Washington, D.C.)

Courses

The University of Michigan plans to begin a graduate program in **mechanical engineering** next semester at the Dearborn campus. Courses leading to a master's degree will include design, thermodynamics and heat transfer, fluid mechanics, dynamics, and materials processing. (P. K. Trojan, Engineering Division, University of Michigan, Dearborn)

Newark College of Engineering offers a new graduate program leading to the M.S. degree in **engineering science**. The course is designed for students whose interests are in related areas of science and engineering, and applicants may possess a bachelor's degree in engineering, physics, chemistry, or mathematics. (Chairman, Graduate Division, Newark College of Engineering, 323 High St., Newark 2, N.J.)

Georgia Institute of Technology is planning a course on **mechanical vibrations** 20 October to 1 November, in Atlanta. Participants should have a college degree in physics or engineering, have completed at least 1 year of calculus, and have a knowledge of statics and dynamics. The course is designed to present basic equations of motions and their solutions and applications in mechanical vibrations. (Director, Dept. of Short Courses and Conferences, Georgia Inst. of Technology, Atlanta)

Stanford University medical school will present a postgraduate course in **tropical health**, 6 January to 14 March. It will include tropical diseases, health sciences, and public health administration. In addition to the subjects relating to tropical medicine, participants may choose elective courses from the regular medical school curriculum. Clinical and laboratory activities will also be included. (Q. M. Geiman, Dept. of Preventive Medicine, Stanford Medical Center, 300 Pasteur Dr., Palo Alto, Calif.)

Grants, Fellowships, and Awards

Graduate fellowships in **psychometrics** are available at Princeton University through the Educational Testing Service (ETS). Recipients will do full-time graduate work in psychological measurement, mathematics, and related areas, toward a Ph.D. degree; they will also work part time during the academic year and for 2 months during the summer with ETS. Stipends are $4150, plus allowance for dependent children. Deadline for receipt of applications: *3 January*. (Director, Psychometric Fellowship Program, ETS, Princeton, N.J.)

Grants are available for **geographical research** in areas other than North America. The program is conducted by the National Academy of Sciences–National Research Council, with financial sponsorship of the Office of Naval Research. The awards vary in amount, but will provide sufficient funds for travel and field and living expenses. They last up to 2 years, for field research in any branch of geography of the recipient's choosing. Candidates for the awards must be graduate students or recent Ph.D. recipients. Deadline for receipt of applications for research starting by April 1965: *1 December*. (Foreign Field Research Program, Div. of Earth Sciences, NAS–NRC, 2101 Constitution Ave., Washington 25)

The University of Mexico is offering fellowships in **parasitology** to U.S. citizens, through a National Institutes of Health grant. The fellowships carry a stipend of $500 per month and travel allowance for the recipient, plus dependent allowance. The program emphasizes research, and also includes clinical work, lectures, seminars, and field trips. Applicants must hold a master's or doctor's degree in science or veterinary medicine. (F. Biagi F., Apartado 25788, Universidad Nacional Autónoma de México, México 20, D.F.)

Fellowships are available for work in **respiratory diseases and tuberculosis** from the American Thoracic Society. Applicants must have been accepted by the institutions in which they plan to work. The program provides awards for the following:

Pre- and postdoctoral research; predoctoral recipients must be working toward an advanced degree other than the M.D. Postdoctoral applicants may hold a Ph.D., M.D., or D.Sc.

Teaching; for physicians interested in teaching topics related to pulmonary disease, and who are entering their second or third year of residency in a field of specialization.

Edward Livingston Trudeau fellowships; for physicians who have com-

pleted their residency and are assured a faculty appointment in teaching or research.

The research awards are renewable for a total of 3 years; the Trudeau awards, for 4 years.

Deadline for receipt of applications: *1 November*. (Director of Medical Education, American Thoracic Soc., 1790 Broadway, New York 19)

Applications are being accepted for the Glorney-Raisbeck fellowship in the **medical sciences**, for the academic year beginning next July. The fellowship carries a $6000 stipend. Applicants must hold the M.D. degree and be residents of New York or adjacent areas. They must also have an institutional appointment which will supplement the stipend and enable them to carry out their research or study program. The fellowship may be renewed for two additional years. Deadline for receipt of applications: *1 November*. (A. C. McGuinness, Committee on Medical Education, New York Academy of Medicine, 2 E. 103 St., New York 29)

Scientists in the News

E. U. Condon, former chairman of the physics department at Washington University, St. Louis, Mo., has been appointed professor of physics and fellow of the Joint Institute for Laboratory Astrophysics at the University of Colorado, Boulder.

H. W. Magoun, dean of U.C.L.A.'s graduate division, has been named to receive the Passano award for 1963. The prize, for research in medical science, carries a $5000 honorarium.

Sam Aronoff, former professor of biochemistry and biophysics at Iowa State University, has become program director in molecular biology at the National Science Foundation.

The Health Physics Society has presented its highest award, the Elda E. Anderson award, to **J. A. Auxier**, health physicist at the Oak Ridge National Laboratory.

Brown University has appointed **Rohn Truell**, mathematics professor, as chairman of the division of applied mathematics.

Leo Lutwak, formerly senior investigator in the National Institute of Arthritis and Metabolic Diseases metabolic diseases branch, has been appointed Jameson professor of clinical nutrition in Cornell University's graduate school of clinical nutrition.

Donald A. Clarke, former associate professor of pharmacology at the Cornell University graduate school of medical sciences, has been named vice president and scientific director of the New Drug Institute, Inc., New York.

Morris M. Newman, research director of the Lightning and Transients Research Institute, Minneapolis, Minn., has been named visiting professor of electrical engineering at the University of Miami.

At the Midwest Research Institute, Kansas City, Mo.:

Cheng-Chun Lee, former senior pharmacologist at the Lilly Research Laboratories, has been appointed senior pharmacologist.

Dean D. Watt, formerly at Arizona State University, has become senior biochemist.

Eldon V. Davis, former head of the virus section at Phoenix Station of the Communicable Disease Center, Arizona, has been named senior virologist.

The Council for a Livable World has appointed Col. **Henry Ashton Crosby** executive director. The Council was formed in Washington 2 years ago by Leo Szilard, professor of biophysics at the University of Chicago, as "an organization of scientists and scholars that would devote itself to practical means of halting the arms race and securing peace." Crosby, who is military adviser to the U.S. Office of Civil Defense, will assume his new post upon retiring from the Army after a 22-year career.

The Society of Chemical Industry, American section, has awarded its 1963 chemical industry medal to **Max Tishler,** president of the Merck, Sharp & Dohme Research Laboratories.

Edward W. D. Norton, professor and chairman of the department of ophthalmology at the University of Miami medical school, has become chairman of the visual sciences study section of the National Institutes of Health.

Douw Steyn, pharmacology professor at the University of Pretoria, has been named chief research officer in the Atomic Energy Board, Union of South Africa.

Alfred M. Vogel, chairman of the chemistry department at Adelphi University, has been named director of the school's Institute of Science and Mathematics.

John P. McCullough, former head of the U.S. Bureau of Mines petroleum thermodynamics laboratory, Bartlesville, Okla., has been appointed to head the Socony Mobil Oil Company's new central research division laboratory, near Princeton, N.J.

The director of the newly formed division of metabolic research at the Chicago Medical School is **Jacob D. Judah**, formerly with the Wistar Institute of Anatomy and Biology, Philadelphia.

L. Bryce Anderson, formerly at the University of Nebraska, has been appointed professor and associate dean of engineering at the Newark College of Engineering.

Robert A. Chase, chief of the section of plastic and reconstructive surgery at Yale University, has been appointed executive head of the department of surgery at Stanford University's medical school.

Recent Deaths

Agnes Chase, 94; retired senior botanist at the U.S. Department of Agriculture; 24 September.

Paul Cloke, 81; dean emeritus of the college of technology, University of Maine; 25 September.

Francis M. Defandorf, 66; chief of the National Bureau of Standards' electrical instruments section; 18 August.

Saul R. Korey, 45; professor and chairman of the neurology department, in Yeshiva University's Albert Einstein medical college; 27 September.

John R. Murdock, 67; assistant to the chief of the Pan American Sanitation Bureau; 29 September.

Will H. Shearon, Jr., 49; editor of *Industrial and Engineering Chemistry*; 29 September.